The Nation's First State Agricultural Experiment Station

Griswold Research Center, Griswold
Opened 2008

Scientists at The Connecticut Agricultural Experiment Station (CAES) investigate the growth of plants and study their pests. Research continues on invasive plants, diseases, insects, ticks, soil and water quality, biofuels, and food safety. Staff members also perform analyses for state agencies. In fiscal year 2012-2013 over 300 nurseries were certified to conduct intra- and interstate business and registered over 600 beekeepers. Thousands of individual plants or other regulated materials being shipped into or from Connecticut were examined for evidence of insects or diseases. The Station began its work in a laboratory at Wesleyan University in Middletown in October 1875. It moved to Yale University in 1877 and to its current location in New Haven in 1882. The research at CAES has helped keep farmers on the farm, and it is the Connecticut farmer who has preserved our pastoral landscape.

Lockwood Farm, Hamden
Opened 1911

Join us at our 2014 events

Associates Annual Meeting—Wednesday, March 26, 7 p.m., Whitney Center, Hamden, CT

Plant Science Day—Wednesday, August 6, 10 a.m., Lockwood Farm, Hamden, CT

Visit outdoor exhibit gardens

Nursery growers' gardens (plants discovered by Connecticut growers) in New Haven, Windsor, and at Lockwood Farm in Hamden

Nursery growers' Plant Identification Garden at the Valley Laboratory in Windsor

Bird and Butterfly Garden at Lockwood Farm in Hamden

Research Farm

Lockwood Farm, Hamden

The Experiment Station's 75-acre research farm in Hamden, called Lockwood Farm, is open to the public during normal business hours. Parking is available inside the gate. Free admission.

Experiment Station Associates

P.O. BOX 3560, AMITY STATION
NEW HAVEN, CT 06525

The ESA is a proactive, volunteer group of Station supporters who assist in promoting the research work carried out at the CAES. All interested persons are welcome to join. Benefits include participation in field trips to Connecticut's leading agricultural businesses and publications highlighting the latest research developments at the Station. For more information, visit the Station web site and click on the Experiment Station Associates.

Printing of this leaflet was funded by the Experiment Station Associates

WWW.CT.GOV/CAES

The Experiment Station's web page features an extensive electronic Plant Pest Handbook, arranged by plant name, which covers diseases, insects, and cultural and nematode problems of plants grown in Connecticut. During 2013, there were 201,083 visits for the entire web site www.ct.gov/caes.

Hours

Residents may call or visit the Experiment Station during normal business hours, 8:30 am-4:30 pm, Monday through Friday, except state holidays.

Telephone Numbers

New Haven area: *Plants*: (203) 974-8601
Insects: (203) 974-8600, *Soils*: (203) 974-8521,
Other Inquiries: (203) 974-8500
Hartford area: *All inquiries*: (860) 683-4977

Statewide: *Toll-free:* (877) 855-2237

Locations

Main Laboratories (203) 974-8500
123 Huntington St.—New Haven, CT 06511-2016

Valley Laboratory (860) 683-4977
153 Cook Hill Road—Windsor, CT 06095-0248

Lockwood Farm (203) 974-8618
890 Evergreen Avenue—Hamden, CT 06518-2361

Griswold Research Center (860) 376-0365
190 Sheldon Road—Griswold, CT 06351-3627

The Connecticut Agricultural Experiment Station 2014

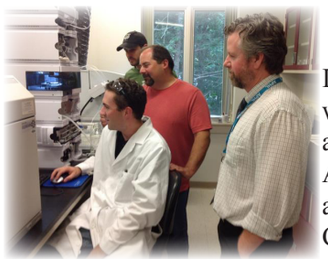
Putting Science to Work for Society
Protecting Agriculture, Public Health, and the Environment

The Experiment Station is a state-supported scientific research institution dedicated to improving the food, health, environment and well-being of Connecticut's residents since 1875

CAES
The Connecticut Agricultural Experiment Station
Putting Science to Work for Society since 1875

Food

Since 1982, the Station has been investigating specialty and ethnic crops to provide new opportunities for Connecticut's farmers. Over 40 fruits and vegetables have been evaluated including globe artichoke, beach plum, edamame, sweet potato, calabaza, and heirloom tomatoes.



In collaboration with the US Food and Drug Administration and other State CT agencies, scientists within the Analytical Chemistry Department have active surveillance and research programs that test commercially available food and consumer products for dozens of heavy metals such as arsenic; nanoparticles; and tens of thousands of different pesticides, toxins and poisons. In 2013, the Department analyzed more than 2,380 samples.

In response to grower and Connecticut craft brewer interest, research is underway to evaluate disease resisitance hop varieties on high and low trellis systems.

Did you know that CAES is Connecticut's official seed testing laboratory and works with the CT Department of Agriculture to test vegetable, turf, and crop seed every year?

Health

Station scientists at the Center for Vector Biology & Zoonotic Diseases monitor mosquito-borne viruses such eastern equine encephalitis and West Nile throughout the state from June through October, and are investigating the impact of global climate change on the ecology of these viruses in the region.

Lyme disease and other tick-borne illnesses continue to be of major public health concern. Station scientists are conducting an integrated tick management study in the town of Redding to evaluate a combination of methods to reduce tick abundance and the risk of tick-borne diseases, using a biological control agent (fungus) within a rodent bait box that treats mice and kills feeding ticks.

Bed bugs have become a major urban pest in Connecticut causing economic hardship and social dislocation to those who have experienced infestations. Scientists at CAES are studying the biology and adaptive behaviors associated with human feeding and evaluating novel chemical repellants and attractants for early detection and control.

Did you know that the CDC officially recognized that the actual number of cases of Lyme Disease is likely to be ten times what is reported, suggesting there were approximately 26,500 cases in CT in 2012?

Environment

Station scientists are intensively studying the properties and functions of biochar, the charcoal-like byproduct from heating biomass waste materials. When mixed into the soil, biochar may bind chemical contaminants, reduce emissions of climate-changing gases, alter earthworm behavior, and improve crop yield by suppressing plant diseases, promoting growth of beneficial microbes, and retaining water and nutrients.

The emerald ash borer (EAB) was found in Connecticut in 2012 and several counties have been placed into state and federal quarantine for ash and hardwood firewood. Station scientists are using a beetle-hunting wasp as a biosurveillance tool to help detect the EAB. Thousands of two parasitoid wasps have also been released for the biological control of EAB in cooperation with the USDA.

Station efforts led to improved attractants and traps for spotted wing drosophila, a major pest of berry crops. Use of these monitoring traps saved New England fruit growers millions of dollars and crop losses.

Did you know that Connecticut's annual average daily temperature has increased by an average of 0.6 ^{o}F per decade since 1970, the 12th fastest in the nation?

Public Service

Plant Science Day 2013. Join us on Wednesday, August 6th, 2014.

The soil testing services and recommendations made by The Connecticut Agricultural Experiment Station reduce unnecessary fertilizer treatments to lawns and nursery stock throughout the state. This provides direct economic and environmental benefit to the suburban community by reducing nitrogen runoff into soil and water.

Station Staff members answered more than 30,000 public inquiries during 2013 and attended or participated in many exhibits, conferences, and outreach programs throughout the state.

Did you know that CAES inquiry office answers over 31,000 questions about plants, insects, and soil from CT residents in 2013?